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NEW WATERSTRIDERS FROM BRAZIL
(HEMIPTERA)

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The present paper contains the description of one new species of Gerridae (Genus *Rheumatobates* Bergroth) and two new species of Veliidae (Genus *Microvelia* Westwood) from Brazil. The types have been deposited as stated in the descriptions. The measurements employed in the descriptions are to the same scale and such that 80 units equal one millimeter.

In a subsequent paper the authors plan to publish an annotated list of the waterstriders of Brazil. The junior author and colleagues are collecting many specimens of aquatic and other Hemiptera in the primitive forests of Brazil, where very little or no collecting at all has been done.

Microvelia parana, n. sp.

Macropterous form: Head moderately convex, brownish with median impressed line, sides adjacent to eyes and apex black-fuscous. Antennae slender, moderately long, rather shortly densely pilose, with last two segments quite slender, measurements—I, 16; II, 10; III, 22; IV, 33. Rostrum testaceous with last segment infusate. Eyes large, reddish brown. Legs with femora nearly equal in thickness in both sexes, unarmed and without singular structure modifications, brownish with coxae, trochanters and bases of femora testaceous.

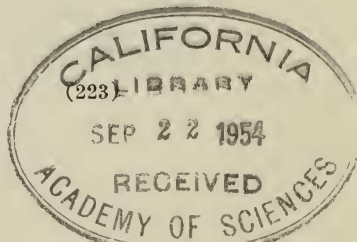
Pronotum blackish fuscous with a transverse flavous band in front, moderately convex across humeri, wider across humeral angles than median length (58:46), sparsely clothed with very short yellowish pubescence, with median longitudinal ridge fairly distinct on disc. Entire body beneath and sides (save connexiva) black-fuscous, with considerable bluish pruinose; abdomen above testaceous with sutures between segments narrowly embrowned. Hemelytra fuscous with two longitudinal stripes at base and three to five rounded spots beyond middle silvery white. Female broader and stouter than male. Apterous form unknown.

Male: Slenderer than female; genital segments embrowned, moderately large. First genital segment above with hind margin slightly concave at middle, beneath deeply broadly rounded excised behind; second segment beneath with a long finger-like elevation (ridge) on each side. Abdomen beneath without spines or tubercles.

Length, 1.90-2.20 mm.; width, 0.70-0.82 mm.

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Type (male) and *allotype* (female), Belem, Para, Oct. 9, 1938, Hambleton and Sauer, Drake Collection. Paratypes: 1 specimen, taken with type; 3 examples, Paru River, Para, Dr. Calvalho; and 3 specimens, Chapada, Bras.

On account of the prominent rounded ridges, on the inferior surface of the second genital segment of the male, this new species is probably most closely related to *M. sarpta* Drake and Harris. However, the male of the later has much longer antennae (seg. III, 35; IV, 45), inordinately large and somewhat laterally compressed intermediate femora and longer rounded ridges on inferior side of second genital segment. The third genital segment (tenth tergite) is devoid of lateral spines in both species.

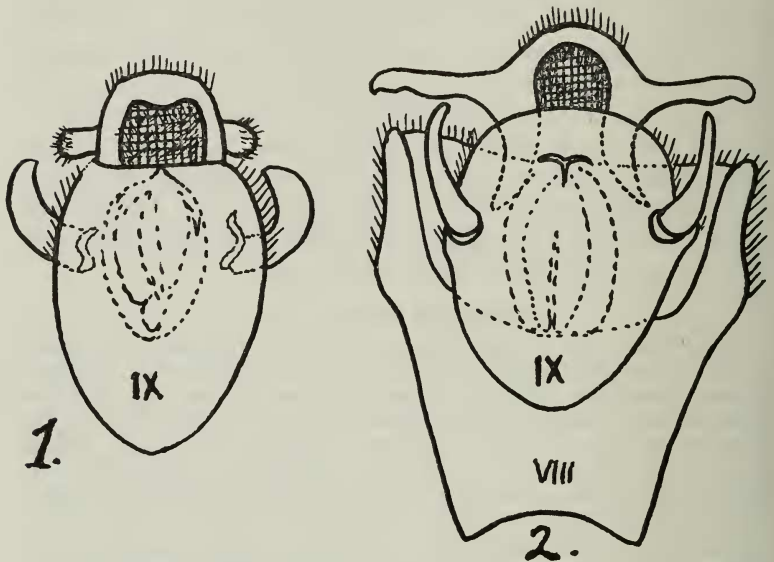


Fig. 1. *Microvelia quieta*, n. sp., male genitalia, 9th and 10th tergites.
Fig. 2. *Microvelia mimula*, B.-W., male genitalia, 8th-10th tergites.

Microvelia quieta, n. sp. (Fig. 1)

Apterous form: Small, slender, brownish testaceous with the fuscous and bluish pruinose markings somewhat variable as noted in structural descriptions. Antennae slender, shortly pilose, dark fuscous with basal part of first segment testaceous, measurements—I, 16; II, 11; III, 21; IV, 33. Head reddish brown with impressed median line, sides bordering eyes and apex blackish fuscous; eyes large, dark fuscous. Rostrum testaceous with last segment dark fuscous, reaching to the middle of mesosternum. Legs unarmed in both sexes, with femora nearly equal in thickness, testaceous with most of dorsal surface of femora (save anterior pair) fuscous: first and second tarsal segments of both middle and hind legs almost subequal.

Pronotum testaceous or brownish testaceous with anterior third (sometimes as much as two-thirds) blackish fuscous and with a large transverse band slightly back of front margin flavous, darkened area also, with some bluish bloom, with punctures rather small and not prominent, broadly projected posteriorly, covering about half of mesonotum, with hind margin slightly concave at middle, with transverse row of punctures separating fore and hind lobe small and not prominent, much wider at middle than median length (43:24); hind lobe twice as long as front lobe. Abdomen above brownish, with one or two basal tergites blackish and two or three tergites in front of last tergite pale testaceous; tergites slightly tapering posteriorly; connexiva with segments largely testaceous; abdomen beneath testaceous, the sides of thorax and abdomen (save connexiva) blackish. Female broader than male, usually also darker with more bluish pruinose on dorsal surface; connexiva slightly wider than in male, not strongly reflexed behind.

Male: Slenderer than female; abdomen beneath devoid of tubercles or spines. Hind legs scarcely stouter than middle pair; tibiae beneath with a row of unusually long brownish hairs, each hair about twice as long as the diameter of the segment. Genital segments moderately large (fig. 1); first segment above with hind margin truncate, beneath broadly roundly notched behind; third segment with a small lateral spine on each side. Parameres rather broad, curved inwardly.

Length, 1.85-2.00 mm.; width, 0.65-0.80 mm.

Type (male) and *allotype* (female), Camo do Rio Claro, Minas Geraes, Brazil, Museu Nacional (Rio de Janeiro). *Paratypes*: 11 specimens, same data as type. Winged form unknown.

In size and general appearance, the apterous form of this species is quite similar to *M. mimula* B.—White (fig. 2) and *M. cubana* Drake, but differs in having the hind tibiae of the male provided with long hairs on inferior surface. The male of *mimula* (fig. 2) also has a small tubercle at the middle of the hind margin of the penultimate ventrite, and the tenth tergite (third genital segment) armed on each side with a long lateral spine.

Rheumatobates curracis, n. sp.

Macropterous form: Small, velvety reddish brown with the anterior part of pronotum testaceous or orange-testaceous; hemelytra dark fuscous with the veins dark fuscous; head dark velvety brown with the pale brown, crescent-shaped spot extending anteriorly along the margins of the eyes. Eyes large, fuscous. Antennae dark brown with basal segment testaceous, with the usual long bristly hairs, unmodified in male, measurements—I, 20; II, 8; III, 21; IV, 18. Rostrum fuscous, shining, with tip extending slightly beyond prosternum.

Pronotum large, slightly convex, impressed on median line in front of disc, with pubescence yellowish golden (testaceous in front), with humeral angles slightly raised, rounded behind, the median length and width across humeri subequal (56:54). Hemelytra very long, much longer than abdomen, with transverse breaking suture and median longitudinal streak pale, the basal marginal vein wide, with a row of hairs near outer edge. Abdomen above dark fuscous, with connexiva dark brown. Pro- and mesosternum pale testaceous; metasternum and

venter (last segment testaceous in female) dark reddish fuscous. Coxae and trochanters of all legs and anterior femora testaceous; middle and hind femora basally slightly testaceous, basally beneath testaceous. Apterous form unknown.

Male: Legs and antennae straight, unmodified. Genital segments rather long, above testaceous with last segment a little embrowned, beneath testaceous; last ventrite longer than the preceding segment, truncate behind. Anterior femora beneath with several extremely long, stiff, bristly, dark brown hairs.

Female: Very little larger than male. Genital segments long, testaceous with cylindrical apical part dark brown.

Length, 1.85 mm. (to apex of abdomen, 2.50 mm. (including hemelytra); width, 0.70 mm. (across humeri).

Type (male) and *allotype* (female), Eironepe, Rio Jurua, Amazonas, Brazil. 1950, Jose C. M. Carvalho, Museu Nacional (Rio de Janeiro).

Paratypes: 3 specimens, taken with type.

Separated from *R. bonariensis* (Berg) and other South American members of genus having straight appendages by the color as well as structural differences.